Paper No. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JODY A. KOCSIS, SHERI L. BLYSTONE,
EWA A. BARDASZ and MARVIN B. DETAR

Appeal No. 98-0192
Application No. 08/572,281

ON BRIEF

Before Kimlin, Waltz and Lieberman, Administrative Patent Judges.

Lieberman, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the decision of the examiner refusing to allow claims 1 through 69, which are all the claims pending in this application.

THE INVENTION

The invention is directed to a process for lubricating an engine with a lubricant

composition. The composition comprises a major amount of oil of lubricating viscosity and a minor amount of a salt of the reaction product of a hydroxy aromatic compound and an aliphatic carbonyl carboxylic compound.

THE CLAIMS

Claims 1, 2, 16, 53 and 67 are illustrative of appellants' invention and are reproduced below.

Claim 1. A process for lubricating an engine which contains at least one ceramic part which requires lubrication, comprising supplying to said part a lubricant composition comprising:

(a) a major amount of an oil of lubricating viscosity, and

(b) a minor amount of a salt of the reaction product of (I) an aliphatic carbonyl carboxylic compound and (ii) a hydroxyaromatic compound, at least a portion of the molecules of which are alkyl-substituted, said salt being soluble in the oil of lubricating viscosity at the operating temperature of the engine.

Claim 2. The process of claim 1 wherein the oil of lubricating viscosity is an ester.

Claim 16. The process of claim 15 wherein the alkyl phenol contains a *tert*-butyl group in a position *ortho* to the hydroxy group.

Claim 53. A composition of matter comprising a salt of the reaction product of (I) an aliphatic carbonyl carboxylic compound and (ii) a hydroxyaromatic compound containing at least two hydrocarbyl substituents each having at least 4 carbon atoms, at least a portion of the molecules of which are substituted with an alkyl group of at least 8 carbon atoms, said hydroxyaromatic compound further containing a tertiary alkyl group in a position ortho to the hydroxy group.

Claim 67. A process for lubricating an internal combustion engine which contains at

least one ceramic part which requires lubrication, which operates at a temperature of at least 250/C at the top ring reversal position, or which is powered by natural gas, comprising supplying to such an engine a lubricant composition comprising:

(a) a major amount of an oil of lubricating viscosity, and

(b) a minor amount of a salt of an alkylene-linked polyaromatic molecule, the aromatic moieties of which comprise at least one hydrocarbyl-substituted phenol and at least one carboxy phenol, said salt being soluble in the oil of lubricating viscosity at the operating temperature of the engine.

THE REFERENCES OF RECORD

As evidence of obviousness, the examiner relies upon the following references.

Blystone et al.	5,356,546	Oct. 18, 1994
Bardasz et al. (filed Sept. 30, 1993)	5,458,794	Oct. 17, 1995

THE REJECTIONS

Claims 1 through 69 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blystone alone or in combination with Bardasz.

OPINION

We have carefully considered all of the arguments advanced by appellants and the examiner and agree with the examiner that the aforementioned rejection of claims 1 through 66 and 69 under 35 U.S.C. § 103(a) is well founded. Accordingly, we sustain this rejection. We agree with the appellants that the aforementioned rejection of claims 67 and 68 under 35 U.S.C. § 103(a) is not well founded. Accordingly, we do not

sustain this rejection.

The Rejection under § 103(a)

As an initial matter, the appellant groups' claims 2, 3, 20, 21, 37 and 38, Group (A), claims 53 through 60, Group (B), claims 16, 27, 33, 34, 50 and 51, Group (C) and claims 67 and 68, Group (D), each Group being separate from claim 1 and the balance of the claimed subject matter. See Brief, page 4. Accordingly, we select claims 1, 2, 16, 53 and 67 as representative of the claimed subject matter and limit our consideration thereto. 37 C.F.R. § 1.192 (c)(7)(1995).

We find that Blystone discloses metal salts useful as additives for lubricants. See column 1, lines 7-9 and column 25, lines 65-66. We further find that the metal salts of the invention are useful as additives in preparing lubricant compositions where they function to improve, for example, detergent, dispersant, anti-rust, antioxidant and the like properties. See column 23, lines 34-38. Based upon the above findings, it is reasonable to conclude that the metal salt is soluble in the oil of lubricating viscosity at the operating temperature of the engine, in order fulfill its intended function, as required by the claimed subject matter. Blystone is also directed to lubricants based on oils of lubricating viscosity and additive concentrates containing the metal salts. See column 3, lines 54-56 and column 25, line 65 to column 26, line 26. We find that Examples E

through K, columns 27-28, exemplify lubricants comprising oil of lubricating viscosity and containing the metal salts disclosed by Blystone. We find that minor amounts of the metal salts are added to the lubricants. See Examples E to K, and column 23, lines 50-53. We further find that these oils of lubricating viscosity include esters of carboxylic acids and polyols as well as esters of polycarboxylic acids and alcohols as required by the claims of Group (A). See column 26, lines 3-9.

As to the composition of matter claims, we find that Blystone discloses a metal salt prepared from the reaction product of a hydroxy aromatic compound and an aliphatic carbonyl carboxylic acid. See column 14, line 24 to column 15, line 68. We further find that the hydroxy aromatic compounds are disclosed at column 15, lines 21 to 41 and correspond to the hydroxy aromatic compounds disclosed in the specification at page 23, line 28 to page 24, line 17. We find that Blystone discloses sterically hindered phenols which overlap those of the specification. These phenols include 2-t-butyl phenol and 2,6-di-t-butyl phenol. See column 15, line 27. Indeed, Blystone discloses that the reaction product of the hydroxyl aromatic compound and the carboxylic compound results either in a carboxylic acid or a lactone depending upon the extent to which the hydroxy aromatic compound is hindered. See column 16, lines 13-19. Based upon the above findings, we conclude that the hydroxy aromatic compounds of Blystone may contain a t-butyl group as required by claim 16, Group (C) and the resulting composition

of matter contains a

t-butyl group in the ortho position as required by claim 53, Group (B).

As to the carbonyl carboxylic acid components required to form the metal salt, we find that carbonyl carboxylic components disclosed by Blystone, column 15, lines 48-51 overlap those disclosed in the specification page 24, lines 18-25. In addition, we find that the process for the preparation of the metal salt is substantially identical to that disclosed in the specification. See Blystone, column 15, lines 48-63. Compare the disclosure therein with the specification, page 27, lines 1-6.

Appellants have repeatedly argued that the requirement of the claimed subject matter that the additives are soluble in the lubricating oil is not disclosed by Blystone. See Brief, pages 5 and 8. In accordance with our finding, ***supra***, we determined that the metal salt prepared by Blystone was substantially the same as that of the claimed subject matter and each is being mixed with an oil of lubricating viscosity. It is well settled that when appellants' product and that of the prior art appears to be identical or substantially identical, the burden shifts to appellants to provide evidence that the prior art product does not necessarily or inherently possess the relied-upon characteristics of appellants' claimed product. ***In re Fitzgerald***, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980); ***In re Best***, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977). On the record before us, no evidence is present directed to differences in additive

solubility at the operating temperature of the engine.

As for the requirement of at least one ceramic part, we find that Blystone discloses that the lubricants include crankcase lubricating oils for spark ignited and compression ignited internal combustion engines such as automobile and truck engines, marine and railroad diesel engines and the like. See column 23, lines 39-44. In our view, the disclosure of Blystone applies to all internal combustion engines and appellants have not persuaded us that neither the possession of a ceramic part, nor the use of a particular fuel to operate the engine would have convinced one of ordinary skill in the art to interpret the reference in any other manner.

As to claims 67 and 68, "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a ***prima facie*** case of unpatentability," whether on the grounds of anticipation or obviousness. ***In re Oetiker***, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). On the record before us, the examiner has cited the Blystone reference as disclosing the metal salt to reject the claimed subject matter and establish a ***prima facie*** case of obviousness. The examiner, however, has not separately considered the alkylene-linked polyaromatic molecule, the aromatic moieties of which comprise at least one hydrocarbyl-substituted phenol and at least one carboxyl phenol as required by the claimed subject matter and has not shown how the disclosure of Blystone would result in a metal salt having both the

required carboxy group and a hydroxy group attached to the same aromatic ring.

Accordingly, as to claims 67 and 68, we have determined that the examiner's legal conclusion of obviousness is not supported by the facts. "Where the legal conclusion is not supported by the facts it cannot stand." ***In re Warner***, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967).

DECISION

The rejection of claims 1 through 66 and 69 under 35 U.S.C. § 103 as being unpatentable over Blystone alone or in combination with Bardasz is affirmed.

The rejection of claims 67 and 68 under 35 U.S.C. § 103 as being unpatentable over Blystone alone or in combination with Bardasz is reversed.

The decision of the examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

EDWARD C. KIMLIN Administrative Patent Judge	))))))) BOARD OF PATENT
THOMAS A. WALTZ Administrative Patent Judge	) APPEALS) AND) INTERFERENCES
PAUL LIEBERMAN Administrative Patent Judge	))))

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